



KING COUNTY AUDITOR'S OFFICE

Jail Health Services' Pharmacy
Operations & Medication Administration
2007-04

This audit was conducted in response to a council motion directing our office to review Jail Health Services pharmacy operations and medication administration practices. The audit objectives were to:

- Evaluate processes for securing and tracking medications (including narcotics) and ensuring medications are appropriately dispensed and distributed.
- Assess the effectiveness of the Jail Health Services quality assurance activities.
- Review staffing policies and practices, including workload and staffing trends.

Overall, the audit found that Jail Health Services (JHS) patients are at no greater risk of harm due to medication errors than patients in other healthcare settings. Nonetheless, opportunities exist for JHS to increase accountability in its medication processes. Our review of JHS quality assurance activities concluded that JHS has developed a range of activities that are consistent with healthcare industry best practices for quality improvement. However, some of these practices have only recently been implemented, and practices for measuring impacts could be improved. With regard to staffing, the audit team found that JHS has developed a staffing model based on workload and productivity data for pharmacy shifts and has begun to do so for nursing. Implementation of the new electronic health record system should provide JHS program staff with the workload and productivity data necessary to strengthen current staffing models and practices.

The Auditor's Office retained a consultant, Westcoast Consulting Group, LLC, to provide technical and healthcare expertise on this project.

Pharmacy & Medication Administration Processes

Our consultant concluded that inmates are at no greater risk from harm due to medication-related errors than patients in other healthcare settings. This conclusion was based on direct observations, collective healthcare experience, a review of inmate and staff complaints compiled by the King County Ombudsman's Office, and JHS self-reported incidents. The consultant found that the number of incidents that actually caused harm was a small percentage of all incidents and was consistent with national benchmarks.

The audit also identified opportunities for medications to be lost or diverted, and it found that there were limited controls in place to detect such events. Additional controls are in place for narcotics, but these controls could also be strengthened.

Quality Assurance Activities

The audit team determined that Jail Health Services is developing a range of quality assurance activities that are consistent with healthcare industry best practices for quality improvement. However, some of these practices, such as tracking medication incidents by severity and cause, have only recently been implemented, and so follow up may be needed to assess these activities. Additionally, practices for measuring impacts could be improved by focusing more on publicly reported outcome measures.

Workload and Staffing Trends

The audit concluded that the JHS pharmacy staffing model is based on an analysis of workload and pharmacy staff productivity. However, this model was developed prior to significant changes in operations, such as the new electronic health record system. Regarding nurse staffing, the current approach could be improved through development of a staffing model that is systematically linked to workload demands and productivity goals.

The audit team also identified a pattern of nursing shifts worked by fewer nurses than planned. However, because the nurse staffing plan was not developed using workload and productivity data, the team could not determine whether a shift worked by fewer nurses than planned is actually insufficiently staffed to meet the demands of the workload.

Recommendations

The report includes 15 recommendations intended to:

- Improve accountability, efficiency, and accuracy of medication dispensing, administration, and quality assurance processes
- Ensure nurse and pharmacy staffing levels match workload demands

Executive Response

The executive concurred with all audit recommendations.